

Application No. 10/532,534

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Claims 1-53 (Cancelled)

54. (Previously Presented) A rotary bed comprising:
a base settable on a floor, the base including a head at a distance from the floor and whose distance from the floor is adjustable;
a reclining frame sized for receiving a mattress;
a rotary hinge arranged at the head of the base for connecting the reclining frame to the base and for permitting rotation of the reclining frame relative to a vertical axis;
wherein the rotary hinge includes a circular, annular supporting ring that is closed in the circumferential direction, a swiveling bolster that supports the reclining frame being pivotably supported in the supporting ring, the swiveling bolster being connected to the base via only the supporting ring and without any axial pegs.
55. (Previously Presented) The rotary bed according to claim 54, wherein the swiveling bolster has two longitudinal spars that are connected to each other via a pair of separated cross braces located within the supporting ring.
56. (Previously Presented) The rotary bed according to claim 55, wherein each cross brace is formed from two interconnected braces, each of which is rigidly and undetachably connected to an associated one of the longitudinal spars.
57. (Previously Presented) The rotary bed according to claim 56, wherein the two cross braces are screwed together.
58. (Previously Presented) The rotary bed according to claim 55, wherein the distance between the longitudinal spars is adjustable.
59. (Previously Presented) The rotary bed according to claim 55, wherein the longitudinal spars have bearing elements at their ends that interact with the supporting ring.
60. (Previously Presented) The rotary bed according to claim 59, wherein each bearing element includes at least one axle that is connected to the respective longitudinal spar

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and a roller that can turn on the axle and wherein the axles are aligned with the supporting ring in the radial direction.

61. (Previously Presented) The rotary bed according to claim 59, wherein the bearing means elements are arranged relative at corners of a quadrilateral.

62. (Previously Presented) The rotary bed according to claim 55, wherein the supporting ring has a groove that is open on an inside and is continuous.

63. (Previously Presented) A rotary bed comprising:
a base settable on a floor, the base including a head spaced a distance from the floor and whose distance from the floor is adjustable;
a reclining frame sized for receiving a mattress;
a rotary hinge arranged at the head of the base for connecting the reclining frame to the base and for permitting rotation of the reclining frame relative to a vertical axis;
wherein the rotary hinge has a circular arc shaped, curved supporting ring for supporting a swiveling bolster for rotation about a rotational axis that is offset laterally relative to a longitudinal axis of the base.

64. (Previously Presented) The rotary bed according to claim 63, wherein the swiveling bolster is connected to the reclining frame.

65. (Previously Presented) The rotary bed according to claim 63, wherein the supporting ring has a radius of curvature that is greater than half a width of the reclining frame.

66. (Previously Presented) The rotary bed according to claim 63, wherein the rotary hinge includes a pair of axle elements that interact with a positive fit, each of the axle elements including a rotational axis that coincides with a geometric axis of the supporting ring.

67. (Previously Presented) The rotary bed according to claim 63, wherein one of the axle elements is provided on the swiveling bolster and the other axle element is provided on the base.

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68. (Previously Presented) The rotary bed according to claim 63, wherein the supporting ring includes a groove that is open on an inside and in which the swiveling bolster is guided.

69. (Previously Presented) The rotary bed according to claim 63, wherein the swiveling bolster includes at least one bearing element that interacts with the supporting ring at a radial distance from an axle element.

70. (Previously Presented) The rotary bed according to claim 63, wherein the swiveling bolster includes at least two separate bearing elements that interact with the supporting ring at a radial distance from an axle element.

71. (Previously Presented) The rotary bed according to claim 63, wherein the supporting ring extends over a circumferential angle of 90° or greater.

72. (Currently Amended) A rotary bed comprising:

a base settable on a floor, the base including a head spaced a distance from the floor and whose distance from the floor is adjustable;

a rotary hinge arranged at the head of the base, the rotary hinge having a rotational axis that is aligned vertically,

an intermediate frame including two parallel intermediate frame spars that are attached to the rotary hinge; and

a reclining frame sized for receiving a mattress, the reclining frame having a width that is greater than a distance between the intermediate frame spars, the reclining frame being divided into a central section, a back section, and a foot section, wherein each section of the reclining frame is bound laterally by two associated longitudinal spars that extend parallel to each other, and the longitudinal spars of the central section are connected exclusively to the intermediate frame wherein each intermediate frame spar has at least one laterally projecting extension arm for attaching to the corresponding longitudinal spar and the intermediate frame spars are connected to each other by at least two braces at a height of the extension arms and the at least two braces lie in two parallel planes that are separated in the vertical direction relative to a position of use of the bed.

73. (Cancelled)

74. (Previously Presented) The rotary bed according to claim 72, wherein each of the intermediate frame spars has a tubular profile.

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75. (Cancelled)

76. (Canceled)

77. (Previously Presented) The rotary bed according to claim 72, wherein the two braces are offset relative to each other in a longitudinal direction of the intermediate frame spars.

78. (Previously Presented) The rotary bed according to claim 76, wherein at least two braces are in a top plane and at least two braces in a bottom plane.

79. (Previously Presented) The rotary bed according to claim 75, wherein a distance between the braces and the intermediate frame spars at least approximately corresponds to a vertical height of the intermediate frame spars.

80. (Previously Presented) The rotary bed according to claim 72, wherein a shaft is rotatably supported between the intermediate frame spars, the shaft having a rotational axis that extends at a right angle relative to a longitudinal extent of the intermediate frame spars, a first lever being rigidly attached to the shaft and wherein the first lever is actively connected with the foot section, a second lever being coupled to a drive device.

81. (Previously Presented) The rotary bed according to claim 80, wherein the drive device has a screw spindle drive, a spindle of the drive device extending in a direction parallel to the longitudinal extent of the intermediate frame spars.

82. (Previously Presented) The rotary bed according to claim 81, wherein a longitudinal guide is attached in the intermediate frame, a guide sled being guided in the longitudinal guide, the guide sled acting as a kinematic connecting point between the drive device and a connecting rod that couples the guide sled to the second lever.

83. (Previously Presented) The rotary bed according to claim 80, wherein two separated and parallel first levers are attached to the shaft.

84. (Previously Presented) The rotary bed according to claim 83, wherein the two first levers have free ends that are set at a distance from the shaft and to which carrier pegs are attached, each carrier peg running in a guide rail connected to the foot section.

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85. (Previously Presented) The rotary bed according to claim 84, wherein the two guide rails extend parallel to each other.

86. (Previously Presented) The rotary bed according to claim 85, wherein the two guide rails extend in a plane that encloses an acute angle with a plane defined by the foot section, the acute angle opening in a direction toward the head end of the bed.

87. (Previously Presented) The rotary bed according to claim 72, wherein the back section is supported so that it can pivot relative to the central section about an axis that extends at a right angle to the intermediate frame spars.

88. (Previously Presented) The rotary bed according to claim 87, wherein the intermediate frame has a counter-support for an adjustment drive of the back section, an attachment point of the counter-support lying underneath the axis about which the back section can pivot relative to the central section.

89. (Previously Presented) The rotary bed according to claim 88, wherein the back section has a counter-support for the adjustment drive, an attachment point to the counter-support of the back section lying higher than the attachment point to the counter-support that is attached to the intermediate frame (10).

90. (Previously Presented) A rotary bed comprising:
a base settable on a floor, the base including a head at a distance from the floor and whose distance from the floor is adjustable;
a rotary hinge arranged at the head of the base, the rotary hinge having a rotational axis that is aligned vertically;
a reclining frame sized for receiving a mattress and divided into a central section, a back section, and a foot section;
an intermediate frame for connecting the reclining frame to the rotary hinge, the intermediate frame including two parallel intermediate frame spars attached to the rotary hinge, and
a sled guide arrangement arranged between the intermediate frame spars, a sled being guided in the sled guide arrangement, a drive device and a connecting rod being attached to the sled, the sled being kinematically coupled to the foot section of the reclining frame.

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91. (Previously Presented) A rotary bed according to claim 90, wherein a shaft is rotatably supported between the intermediate frame spars, that shaft having a rotational axis that extends at a right angle to a longitudinal extent of the intermediate frame spars, a first lever being rigidly attached to the shaft, the first lever being actively connected to the foot section, a second lever being coupled to the drive device.

92. (Previously Presented) A rotary bed according to claim 91, wherein the drive device has a screw spindle drive that includes a spindle that extends in a direction parallel to the longitudinal extent of the intermediate frame spars.

93. (Previously Presented) A rotary bed according to claim 92, wherein a longitudinal guide is attached in the intermediate frame, a guide sled being guided in the intermediate frame, the guide sled acting as a kinematic connecting point between the drive device and a connecting rod that connects the sled to the second lever.

94. (Previously Presented) A rotary bed according to claim 91, wherein two separated and parallel first levers are attached to the shaft.

95. (Previously Presented) A rotary bed according to claim 90, wherein the first levers have free ends that are set at a distance from the shaft and to which carrier pegs are attached, each carrier peg running in a guide rail that is connected to the foot section.

96. (Previously Presented) A rotary bed according to claim 95, wherein the two guide rails extend parallel to each other.

97. (Previously Presented) A rotary bed according to claim 96, wherein the two guide rails extend in a plane that encloses an acute angle with a plane defined by the foot section, the acute angle opening in a direction toward the head end of the bed.

98. (Previously Presented) A rotary bed according to claim 90, wherein the back section is supported so that it can pivot relative to the central section about an axis that extends at a right angle to the intermediate frame spars.

99. (Previously Presented) A rotary bed according to claim 98, wherein the intermediate frame has a counter-support for an adjustment drive of the back section, an attachment point of the counter-support lying underneath the axis about which the back section can pivot relative to the central section.

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100. (Previously Presented) A rotary bed according to claim 99, wherein the back section is provided with a counter-support for the adjustment drive, an attachment point to the counter-support of the back section lying higher than the attachment point to the counter-support that is attached to the intermediate frame.

101. (Previously Presented) A bed comprising;
a reclining frame that is divided into a central section, a back section, and a foot section, wherein each section includes two parallel longitudinal spars; and
a hinge connecting two abutting longitudinal spars of adjacent sections to each other, each longitudinal spar being formed by a quadrilateral tube that transitions integrally into a hinge bracket wherein at least one circular disk shaped spacing element is arranged between the hinge brackets.

102. (Cancelled)

103. (Previously Presented) A rotary bed according to claim 101, wherein two spacing elements are present, each of which is connected without rotational play to the associated hinge bracket.

104. (Previously Presented) A rotary bed according to claim 101, wherein the hinge bracket has a U shaped cross sectional profile producing two parallel bars, the profiles of two hinge brackets forming a hinge being arranged such that the U profiles open toward each other.

105. (Previously Presented) A rotary bed according to claim 101, wherein the hinge bracket transitions smoothly into a profile of the relevant longitudinal spar.

106. (Previously Presented) A rotary bed according to claim 101, wherein the longitudinal spar is formed by a quadrilateral tube, the hinge bracket being formed by a part of an end recess of the longitudinal spar.